

WHAT IS CLAIMED IS:

- 1 1. A method for treatment or prevention of an angioproliferative condition which
2 comprises administering to a patient experiencing said angioproliferative
3 condition a pharmaceutically effective amount of a proteinase to exert an
4 angiostatic effect.
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- 1 2. The method according to claim 1 wherein said angioproliferative condition is a
2 carcinoma, sarcoma, melanoma, ocular retinopathy, retrolental fibroplasia,
3 psoriasis, angiofibromas, endometriosis, hemangioma, rheumatoid arthritis,
4 capillary proliferation within atherosclerotic plaque, or a combination of such
5 disorders.
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- 1 3. The method according to claim 1 wherein said proteinase is derived from a
2 bacterium.
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- 1 4. The method according to claim 3 wherein said bacterium is *Porphyromonas*
2 *gingivalis*.
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- 1 5. The method according to claim 4 wherein said protease is PrtP, HagA, other
2 cysteine proteinase, a HagArep peptide, a fragment or active site thereof, or DNA.
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- 1 6. A composition for treatment or prevention of an angioproliferative condition
2 comprising a pharmaceutically effective amount of a proteinase and an excipient
3 for administration to a patient afflicted with said angioproliferative disorder.
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- 1 7. The composition according to claim 6 wherein said angioproliferative condition is
2 a carcinoma, sarcoma, melanoma, ocular retinopathy, retrolental fibroplasia,
3 psoriasis, angiofibromas, endometriosis, hemangioma, rheumatoid arthritis,

capillary proliferation within atherosclerotic plaque, or a combination of such disorders.

8. The composition according to claim 6 wherein said proteinase is derived from a bacterium.

9. The composition according to claim 8 wherein said bacterium is *Porphyromonas gingivalis*.

10. The composition according to claim 9 wherein said protease is PrtP, HagA, other *P. gingivalis* proteinase, a HagArep peptide, a fragment or active site thereof, or DNA

11. A method for selectively treating an angioproliferative condition which comprises contacting the vasculature supplying a biological structure affected by said angioproliferative condition with an angiostatically effective amount of a protease.

12. The method according to claim 11 wherein said proteinase is contacted with the basolateral surface of said vasculature.

13. The method according to claim 11 wherein said angioproliferative condition is a carcinoma, sarcoma, melanoma, ocular retinopathy, retrolental fibroplasia, psoriasis, angiofibromas, endometriosis, hemangioma, rheumatoid arthritis, capillary proliferation within atherosclerotic plaque, or a combination of such disorders.

14. The method according to claim 12 wherein said protease is derived from a bacterium.

- 1 15. The method according to claim 12 wherein said bacterium is *Porphyromonas*
2 *gingivalis*.
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- 1 16. The method according to claim 15 wherein said protease is PrtP, HagA, other
2 proteinase a HagArep peptide, a fragment or active site thereof, or DNA..
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- 1 17. A method for potentiating the effects of a chemotherapeutically effective agent
2 which comprises co-administering said chemotherapeutically effective agent in
3 the presence of a protease effective to disrupt cell-cell adhesion, cell-matrix
4 adhesion, or both.
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- 1 18. A method for preventing the implantation or sustenance of a fertilized ovum
2 which comprises administering an angiostatically effective amount of a proteinase
3 to a person in whom such preventing is required, sufficient to prevent formation
4 of new vasculature required for implantation or sustenance of said fertilized
5 ovum.
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- 1 19. A method for inhibiting vascular endothelial cell migration which comprises
2 contacting vascular endothelial cells with a molecule selected from the group
3 consisting of cysteine proteinase, HagA protein, HagA peptide, HagA-specific
4 enzymatic activity, HagA active site mimetic, HagA analog, and combinations
5 thereof or DNA
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- 1 A method for reducing cell-cell adhesion, cell-matrix adhesion, or both, which comprises
2 contacting cells, matrix or both with an effective amount of a molecule selected from the
3 group consisting of a cysteine proteinase, HagA protein, HagA peptide, HagA-specific
4 enzymatic activity, HagA active site mimetic, HagA analog, and combinations thereof or
5 DNA